BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Diploma in Construction and the Built Environment Pearson BTEC International Level 3 Extended Diploma in Construction and the Built Environment Pearson BTEC International level 3 Diploma in Civil Engineering Pearson BTEC International Level 3 Extended Diploma in Civil Engineering
Unit number and title	Unit 30: Public Health Engineering
Learning aim(s) (For NQF only)	Learning aim B: Examine methods for disposing of solid domestic waste
Assignment title	Disposal of solid waste
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are working as a trainee civil engineer in a company specialising in public health engineering. The company provides design and build services to a range of clients. Currently, the management is working on an initiative to develop series of guidance documents across the whole organisation. These documents will be available to all employees via the company's intranet. The management has asked the Technical Team to develop three documents relating to drainage, sewage treatment, solid waste disposal and water quality and distribution. This is first of the three documents. These documents will cover the underpinning knowledge as well as application of such knowledge. The management require you to consider a site currently being developed to draw suitable context for various sections of the document. Though you have recently joined the company, your team leader has confidence in your abilities to produce these documents due to your positive attitude towards work. Details of the development are given below: The development has been proposed along the river bank after due consideration of flood levels over the last 125 years. The river is not used for navigation purposes currently. This is a residential development aiming to cater for the commuters.The development is few miles away from the nearest town and has no water and drainage utilities currently close by. The site has been used as a caravan site as well as by the travellers over a number of years. The site is almost flat in terms of its topography. There is a large expanse of land around the site which is low-lying. This area could be purchased or leased on subsidised rates from the owners if used to improve the environment. The preliminary site survey suggests that a lot of electronic equipment as well as construction waste has been dumped

	on site. Before the work on development can start, all this needs to be safely disposed off. There is evidence that the construction waste includes asbestos. Your company is considering making this as their signature sustainable development. They wish to make use of sustainable approaches to the drainage of both foul water and surface water. The company wants to explore innovative and sustainable solutions to water supply, solid waste management and disposal as well as sewage treatment. You will consider a cul-de-sac within the development to design below ground and surface water drainage systems. This cul-de-sac has twenty houses with an average household size of 3 persons. These are a mix of couples with young families as well as young executives sharing accommodation.
Task 1	Produce a document called *Guidance Document – Disposal of solid waste*, using a suitable format as suggested by your team leader. The document will contain illustrations, sketches, line diagrams, photos and any other suitable materials to support your choices. The justifications must be supported with references to credible information sources. Within this well referenced document, include the following: • Type of solid waste likely to be generated post occupancy as well as during site clearance. • Possible methods for disposal of solid waste including advantages and disadvantages of each and making final justified choices for the disposal. Please provide example of their suitability. • Legislative requirements and other constraints relevant to disposal of solid waste and how this has affected your choices. • Evaluate how requirements and constraints impact on the selection of methods for the sorting and disposal of solid domestic waste for a given situation.
Checklist of evidence required	An appropriately referenced word-processed document, using a suitable referencing style such as Harvard. Illustrations/sketches to support the discussions Use of credible and range of resources.
Criteria covered by this task:	
Unit/Criteria	To achieve the criteria you must show that you are able to:

reference	
B.P3	Explain the benefits associated with the separating of different types of solid domestic waste
B.P4	Explain how different requirements and constraints impact on the methods used for the disposal of solid domestic waste.
B.M2	Discuss methods of disposal of solid domestic waste, including the benefits of separating materials and how decisions are influenced by requirements and constraints for a given situation.
B.D2	Evaluate how requirements and constraints impact on the selection of methods for the sorting and disposal of solid domestic waste for a given situation.

Sources of information to support you with this Assignment	**Books** Afullo, A. Integrated Solid Waste Management Handbook: For Engineers, Planners, Environmentalists, students and policy makers (WAMRA TECHNOPRISES, 2014) ISBN 978-9966720535 Bartlett, R E. Public Health Engineering: Sewerage, Second Edition (CRC Press – 2003) ISBN 9780203210895 Chadderton D – Building Services Engineering, 6th Edition (Routledge, 2012) ISBN 978-0415699327 Greeno R and Hall F – Building Services Handbook, 9th Edition (Routledge, 2017) ISBN 978-1138244351 **Web resources** CIBSE Society of Public Health Engineers https://www.cibse.org/Society-of-Public-Health-Engineers-SoPHE
Other assessment materials attached to this Assignment Brief	*None*